

**IN THE UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS**

EGERA, INC.,

Plaintiff,

v.

CISCO SYSTEMS, INC.,

Defendant.

Civil Action No. 1:16-cv-11613-RGS

JURY TRIAL

**EGERA'S CORRECTED RESPONSE TO CISCO'S MOTION TO EXCLUDE THE
REASONABLE ROYALTY OPINIONS OF DR. RYAN SULLIVAN**

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2	March 13, 2018 Kevin Kerrigan Deposition Excerpts
3	May 25, 2018 Expert Report of Stephen L. Becker, Ph.D.
4	Declaration of Mark Jones
5	Cisco UCS 5100 Series Blade Server Chassis Data Sheet, https://www.cisco.com/c/en/us/products/collateral/servers-unified-computing/ucs-5100-series-blade-server-chassis/data_sheet_c78-526830.html
6	Cisco UCS 6324 Fabric Interconnect Data Sheet, https://www.cisco.com/c/dam/en/us/products/collateral/servers-unified-computing/ucs-6300-series-fabric-interconnects/6324-spec-sheet.pdf
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9	Illinois Cloud Reduces IT Cost for School Districts, Cisco Customer Case Study
10	Data Center Value Zone, https://www.cisco.com/c/en/us/solutions/data-centervirtualization/data_center_value_zone.html#~tools (accessed 3/27/2018)
11	Blade Server TCO and Architecture – You Cannot Separate Them, https://blogs.cisco.com/datacenter/blade-server-tco-and-architecture-you-cannot-separate-them
12	May 15, 2018 Cisco’s Supplemental Objections and Responses to Egenera’s First Set of Interrogatories (No. 7)
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18	Cisco Unified Data Center – Changing the Economics of the Data Center, CISCO00063923
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I. INTRODUCTION

Dr. Ryan Sullivan performed a rigorous analysis of the reasonable royalty that would have resulted from a hypothetical negotiation between Egenera and Cisco. In his 94-page opening report,¹ Dr. Sullivan analyzed the reasonable royalty from two approaches: first, he considered a “cost-saving” approach measuring the value to Cisco of offering customers cost-savings features resulting from the ’430 patented technology. Second, he applied an “acquisition” approach, measuring Cisco’s prior agreement to pay for cash flow relating to the accused product, and applying that to infringing UCS system sales attributable to the patented technology.

Cisco’s motion to exclude Dr. Sullivan’s reasonable royalty opinions builds a straw man and burns it in effigy. Cisco’s criticisms rest on false claims about Dr. Sullivan’s analysis, or on classic battle-of-the-experts disagreements that cannot justify exclusion of Dr. Sullivan’s testimony:

- Cisco complains that Dr. Sullivan’s analysis assumes infringement of unaccused UCS configurations that do not contain a fabric extender or an I/O module. Cisco is wrong. All of the sales that serve as the basis of Dr. Sullivan’s analysis include a fabric extender or an I/O module. Dr. Sullivan’s testimony does not suggest otherwise.
- Cisco complains that Dr. Sullivan’s “acquisition approach” includes revenue from the sale of unaccused UCS components. But the acquisition approach calculates the percentage of revenue that Cisco has agreed to pay for cash flow related to the accused

¹ Ex. 1, The opening Expert Report of Dr. Ryan Sullivan (the “Sullivan Rpt.”) consists of 94 pages of text and approximately one thousand pages of tables, data, and calculations.

product and applies that ratio to Cisco's infringing UCS sales attributable to the patented technology, not unaccused products.

- Cisco complains that Dr. Sullivan's "cost savings" approach is not based in established economic theory, ignoring both the citations in Dr. Sullivan's report and his testimony to the contrary. A mere disagreement between experts does not justify exclusion of testimony under *Daubert* or FED. R. EVID. 702.

Because Cisco does not attack the information Dr. Sullivan actually relied on, or the work Dr. Sullivan actually performed, Cisco's motion must fail.

II. BACKGROUND

A. Dr. Sullivan's Methodology

Plaintiff Egenera, Inc. ("Egenera") retained Dr. Sullivan to calculate a reasonable royalty for Cisco System Inc.'s ("Cisco's") use of U.S. Patent No. 7,231,430 (the "'430 patent"). Dr. Sullivan considered a hypothetical negotiation for Cisco taking a nonexclusive license to the '430 patent in or around July 2009, and performed an analysis addressing the standard factors described in *Georgia-Pacific Corp. v. United States Plywood Corp.* Ex. 1, Sullivan Rpt. ¶ 54, § 15. As a damages expert, Dr. Sullivan's role was to determine damages assuming that Cisco's Unified Computing System ("UCS") infringes the '430 patent as Egenera alleges. *Id.* ¶¶ 15, 48.²

Based on the facts of the case, Dr. Sullivan determined that the parties would agree to a per-unit royalty structure on a per-server basis because the number of servers deployed in a given UCS configuration is commensurate with the extent of use of the patented technology and the benefits of the patented technology. Ex. 1, Sullivan Rpt. ¶¶ 105-108. But Dr. Sullivan did not

² see also *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1325 (Fed. Cir. 2009) ("The hypothetical negotiation also assumes that the asserted patent claims are valid and infringed.").

find that Egenera would agree to license the '430 patent to Cisco readily. Egenera has never licensed its patents,³ and as Dr. Sullivan notes, all of Egenera's products practiced the '430 patent at the time of the hypothetical negotiation. Ex. 1, Sullivan Rpt. ¶¶ 21, 87. Therefore, Dr. Sullivan found that granting an unlimited license to a dominant competitor like Cisco "would effectively be a market-exit maneuver" for Egenera. *Id.* ¶ 156. In consideration of those factors, Dr. Sullivan's royalty is composed of two parts: the server unit base and the per-server royalty.

B. Dr. Sullivan's royalty base includes only infringing UCS configurations

Dr. Sullivan's royalty base includes only infringing configurations of Cisco's sales of UCS systems. Cisco provided UCS sales data beginning on September 1, 2012 and ending on January 27, 2018. *Id.* ¶ 38.⁴ Dr. Sullivan did not perform an independent infringement analysis. Rather, he was provided an instruction on infringement. *Id.* ¶ 48. Based on those instructions, Dr. Sullivan first excluded non-U.S. sales and sales with zero revenue from the royalty base. *Id.* ¶¶ 40, 44-45. Dr. Sullivan then removed HyperFlex and storage servers. *Id.* ¶ 48. Dr. Sullivan further excluded from his analysis UCS C-series rack servers that do not use UCS Manager (also known as "standalone" UCS servers), and any servers potentially used as part of a UCS Mini solution. *Id.* ¶ 48-50. The remaining UCS B-series servers and C-series servers using UCS manager require a Fabric Extender ("FEX") or in-out module ("I/O module").⁵

³ Ex. 2, Deposition of Kevin Kerrigan ("Kerrigan dep.") 56:14-19 (Mar. 13, 2018). Cisco's damages expert admits as much, stating that "[i]t is my understanding that the '430 patent has never been licensed." Ex. 3, Opening Report of Steven Becker ("Becker Rpt.") ¶ 168.

⁴ Cisco provided UCS sales data is in fourteen excel files running from CISCO00205848-61.

⁵ Ex. 4, Declaration of M. Jones ¶ 3; *see also, e.g.* Ex. 5, Cisco UCS 5100 Series Blade Server Chassis Data Sheet ("The Cisco UCS 5100 Series is designed for use in the Cisco UCS environment and requires Cisco UCS Manager, UCS 6200 Series or 6300 Series Fabric Interconnects, and UCS 2200 or 2300 Series Fabric Extenders and blades servers, or the UCS 6324 Fabric Interconnect and blade servers to function in this integrated environment.") (*available at* <https://www.cisco.com/c/en/us/products/collateral/servers-unified-computing/ucs->

Having apportioned Cisco's UCS sales data down to infringing configurations, Dr. Sullivan implements two independent approaches to determine a per-server royalty: (1) a cost-savings approach where he determines the value of the patented invention to Cisco based on the cost savings it provides over other systems, and (2) an acquisition approach, where he determines a ratio of what Cisco has agreed to pay for cash flow and applies that ratio to infringing UCS sales attributable to the patented technology.

C. Dr. Sullivan's "cost-savings" approach calculates a reasonable royalty based on the cost savings attributable to the infringement of the '430 patent

In his "cost savings" approach, Dr. Sullivan adopts Cisco's focus on UCS's total-cost-of-ownership ("TCO") savings and calculates TCO savings attributable to the patented technology provided by infringing UCS systems and the associated benefit to Cisco. Dr. Sullivan notes many public documents where Cisco champions the TCO benefits of the UCS system to sell UCS to its customers, *Id.* ¶¶ 62-63, including:

- A Cisco UCS presentation that indicates Cisco IT experienced █████ cost savings in cabling, fiber, patch cords, and labor and █████ more power available to servers as a result of UCS.⁶
- A Cisco UCS brochure that reports average administration and management cost savings of UCS of 66%, based on 46 customer case studies.⁷
- A 2014 Total Economic Impact study commissioned by Cisco that found that a hypothetical composite organization of 3,000 employees over a three-year period would realize total cost savings and benefits of \$1,604,680 in net present value terms

5100-series-blade-server-chassis/data_sheet_c78-526830.html). The 6324 Fabric Interconnect "integrates the functions of a Fabric I/O Extender." Ex. 6, Cisco UCS 6324 Fabric Interconnect Spec Sheet p. 10, (*available at* <https://www.cisco.com/c/dam/en/us/products/collateral/servers-unified-computing/ucs-6300-series-fabric-interconnects/6324-spec-sheet.pdf>).

⁶ *Id.* ¶ 62 (*citing* Ex. 19, Accelerating the Transformation to Next Generation Data Center, undated (CISCO00045602, at 31).

⁷ *Id.* ¶ 63(c) (*citing* Ex. 7, Cisco, "Business Advantage Delivered: The Cisco Unified Computing System," July 2015, at 4).

from UCS relative to a legacy server system, with a final risk-adjusted return on investment of 307%.⁸

- A 2012 Cisco customer case study reports that Cisco UCS allowed an education provider to reduce the cost of services for its end users, allowing users to potentially reduce their spending on IT by 30 to 50 percent.⁹

Dr. Sullivan calculates UCS TCO savings using Cisco's own UCS TCO-ROI Advisor, an online tool by Cisco that estimates how much customers can reduce data center capital and operating expenses by deploying UCS.¹⁰ Dr. Sullivan applies UCS sales data provided by Cisco to estimate of the average economic benefit of UCS per server. *Id.* ¶¶ 143-153.

Dr. Sullivan then apportions the per-server UCS savings to account for non-patented technology and Cisco's commercialization efforts. *Id.* ¶¶ 154-65. Dr. Sullivan agrees with Cisco that one of the most significant benefits of the technology claimed in the '430 patent is TCO savings. *Id.* ¶¶ 135,142. As such, Dr. Sullivan determines that the apportioned TCO savings from infringing UCS configurations using the '430 patented technology represent economic benefit to consumers, as well as to Cisco in the form of additional "producer surplus," and explains that such producer surplus is economically equivalent to producer profits in this case.¹¹ Dr. Sullivan opines that TCO cost savings drive Cisco sales and profitability, *Id.* ¶¶ 136, 155, and that the

⁸ *Id.* ¶ 63(d) (citing Ex. 8, Forrester Consulting, "Total Economic Impact of Cisco UCS," July 2014, at 3).

⁹ *Id.* ¶ 63(i) (citing Ex. 9, Cisco Customer Case Study, "Illinois Cloud Reduces IT Costs for School Districts," 2012, at 1-2).

¹⁰ *Id.* ¶ 143 (citing Ex. 10, Cisco Website, Data Center Value Zone – Tools, https://www.cisco.com/c/en/us/solutions/data-centervirtualization/data_center_value_zone.html#~tools (accessed 3/27/2018)).

¹¹ *Id.* ¶ 155 (citing Varian, Hal (2003), Intermediate Microeconomics, 6th ed., New York, NY: Norton, at 388).

apportioned TCO cost savings of the UCS system over other competing systems are therefore attributable to Cisco's profits. *Id.* ¶ 155.

Dr. Sullivan applies a "technology apportionment" to account for the economic benefit of the TCO savings attributable to technology other than what is claimed in the '430 patent. *Id.* ¶¶ 135-41, 154-55. Using the categories of TCO savings identified in Cisco's marketing documents, *Id.* Attachment G-1, and Dr. Jones' opinion on the categories of cost savings attributable to the '430 patented technology, Dr. Sullivan calculates a conservative percentage of economic benefit attributable to Cisco's use of the '430 Patent. *Id.* ¶¶ 138-40.

Dr. Sullivan further applies a "commercialization apportionment" to credit Cisco for its commercialization efforts in bringing the UCS system to market. *Id.* ¶¶ 156-65. To that end, Dr. Sullivan compares the expenditures of Cisco and Egenera in their respective efforts to commercialize the technology claimed in the '430 patent. *Id.* ¶ 156. He compares Egenera's sales, marketing and R&D spending in developing the BladeFrame and PAN Manager products to Cisco's payment for the acquisition of Nuova, the Cisco spin-in created by Cisco employees that developed UCS. *Id.* ¶¶ 158-60. The Nuova acquisition price included sums to acquire the Nexus 5000 switch, which was unrelated to expenditure to develop the UCS product line. *Id.* The Nuova acquisition price is therefore a conservative measure because it gives Cisco commercialization credit for arguably unrelated product development expenses. *Id.*¹² Dr. Sullivan further credits Cisco's post-acquisition expenditures, including Cisco's cost-of-goods-sold and operating expenses in fiscal year 2009. *Id.* ¶ 161.

Multiplying the per server TCO cost savings by both the technology and

¹² Dr. Sullivan further explains how the steps of his commercialization apportionment are tied to the facts of this case, including the parties to the hypothetical negotiation, the accused products, the patented technology, and the date of the hypothetical negotiation. *Id.* at 164.

commercialization apportionment factors yields Dr. Sullivan's per-server royalty opinion based on the cost-savings approach. *Id.* ¶¶ 173-74. Dr. Sullivan applies this per-server royalty to the royalty base of infringing servers to determine reasonable royalties. *Id.* ¶ 235.

D. Dr. Sullivan's "acquisition" approach calculates a reasonable royalty based on Cisco's relevant agreement to pay for cash flow

Dr. Sullivan's acquisition approach examines the amount that Cisco paid for the cash flow associated with Cisco's purchase of Nuova, and applies that percentage rate to infringing UCS sales, again apportioning out the benefits of technology not attributable to the '430 patent.

Dr. Sullivan determines that Cisco's purchase of Nuova directly informs how much Cisco is willing to pay for comparable cash flows. Since Nuova created the products that would become the infringing UCS product line, Cisco's acquisition of Nuova demonstrates Cisco's willingness to pay to acquire access to the technology claimed in the '430 patent. However, Dr. Sullivan's analysis is not dependent upon either the overall Nuova purchase price or on the relative mix of products Cisco acquired through the Nuova acquisition. *Id.* ¶¶ 170-71.¹³ Rather, Dr. Sullivan uses the Nuova acquisition to determine the ratio of Cisco's payment on the one hand, to Cisco's valuation of Nuova on the other hand, for purposes of establishing what Cisco is willing to pay for cash flow. *Id.* ¶¶ 170-72.

Dr. Sullivan then applies that ratio to determine what Cisco would have agreed to pay for the cash flow from infringing UCS configurations that is attributable to the '430 patented technology, on a per-server basis. *Id.* ¶¶ 172-73. To reach his per-server royalty opinion under the acquisition approach, Dr. Sullivan applies a reasonable technology apportionment to account

¹³ For example, Dr. Sullivan explains that although Nuova's products at the time of acquisition included a switch and the server array that would become UCS, apportioning the payment to just the server array product would not impact the resulting ratio, because the apportionment percentage would be applied to both the payment and the cash flow, i.e., it would be applied to both the numerator and the denominator.

for non-patented functionality in the infringing UCS systems. *Id.* ¶¶ 169-175. Dr. Sullivan applies this per-server royalty to the royalty base of infringing servers to determine reasonable royalties. *Id.* ¶ 235.

III. ARGUMENT

A. Legal Standard

The admission of expert testimony is within the sound discretion of the Court. *Newell Puerto Rico, Ltd. v. Rubbermaid, Inc.*, 20 F.3d 15, 20 (1st Cir. 1994). “*Daubert* and Rule 702 are safeguards against unreliable or irrelevant opinions, not guarantees of correctness.” *i4i Ltd. P’ship v. Microsoft Corp.*, 598 F.3d 831, 853-54 (Fed. Cir. 2010); *SimpleAir, Inc. v. Google Inc.*, 2015 U.S. Dist. LEXIS 135915, *2-3 (E.D. Tex. Oct. 5, 2015). “[T]he trial court’s role as gatekeeper [under *Daubert*] is not intended to serve as a replacement for the adversary system.” *Pipitone v. Biomatrix, Inc.*, 288 F.3d 239, 250 (5th Cir. 2002). Accordingly, “a trial court must take care not to transform a *Daubert* hearing into a trial on the merits.” *Id.* “Vigorous cross-examination, presentation of contrary evidence and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.” *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 596 (1993). Thus, “the rejection of expert testimony is the exception and not the rule.” FED. R. EVID. 702 adv. comm. note (2000); *see also Everyscape, Inc. V. Adobe Systems Incorporated*, 1:10cv11597, Dkt. 469 [electronic order of Nov. 26, 2014] (Stearns, J).

A mere disagreement between experts is not a proper basis for exclusion of expert testimony under Rule 702. *Ruiz-Troche v. Pepsi Cola of P.R. Bottling Co.*, 161 F.3d 77, 85 (1st Cir. 1998). As long as an expert's scientific testimony rests upon ‘good grounds, based on what is known,’ it should be tested by the adversary process -- competing expert testimony and active

cross-examination -- rather than excluded from jurors' scrutiny for fear that they will not grasp its complexities or satisfactorily weigh its inadequacies.” *Id.* (quoting *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 590, 596 (1993)).

“There is no rule that a royalty be no higher than the infringer's net profit margin.” *State Indus., Inc. v. Mor-Flo Indus., Inc.*, 883 F.2d 1573, 1580 (Fed. Cir. 1989) (affirming a reasonable royalty in excess of the infringer’s net profits); *accord Powell v. Home Depot USA Inc.*, 663 F.3d 1221, 1238 (Fed. Cir. 2011) (“[I]t is settled law that an infringer's net profit margin is not the ceiling by which a reasonable royalty is capped.”); *Monsanto Co. v. Ralph*, 382 F.3d 1374, 1384 (Fed. Cir. 2004) (“the law does not require that an infringer be permitted to make a profit”); *Golight, Inc. v. Wal-Mart Stores, Inc.*, 355 F.3d 1327, 1338 (Fed. Cir. 2004) (reasonable royalty need not be capped at infringer’s profit forecast for product, or at what infringer “might have preferred to pay”); *Ericsson Inc. v. TCL Commun. Tech. Holdings, Ltd.*, No. 2:15-cv-00011-RSP, 2018 U.S. Dist. LEXIS 78857, at *18 (E.D. Tex. 2018) (holding that “[t]he law is clear that an accused infringer's profit is not a cap on a reasonable royalty,” and finding that a royalty above an infringer’s profits goes to the weight of the evidence, not the admissibility.) “And, where, as here, a patentee is unwilling to grant an unlimited license, the hypothetical negotiation process has its limits.” *Ralph*, 382 F.3d at 1384. The unwillingness of an infringer to pay a royalty above its profits is balanced against the unwillingness of the patent holder to provide the imposed license. *Id.*

B. Dr. Sullivan’s royalty base does not include unaccused UCS configurations

Cisco’s attempt to exclude Dr. Sullivan’s analysis on the basis that he includes unaccused products in his royalty base fails because Dr. Sullivan does not include unaccused products in his royalty base. Cisco correctly states that Egenera does not accuse UCS systems without a FEX or I/O module of infringement. Cisco further claims that Dr. Sullivan included such systems in his

analysis but provides no evidence to support that claim. Cisco is mistaken. As discussed above, Dr. Sullivan’s royalty base includes B-series servers and C-series rack servers used with UCS Manager, excluding standalone rack servers and any servers potentially used in a UCS Mini configuration. Excluding UCS Mini and standalone rack servers also excludes systems with no FEX or I/O module. Ex. 4, Declaration of Mark Jones ¶ 3. UCS B-Series servers include the I/O module in the chassis as a required component of the configuration. *Id.* And C-series rack servers used with UCS Manager are always used with a FEX or I/O module. *Id.* Having partitioned the sales data down to accused systems that are necessarily sold in infringing configurations, further partitioning would be inappropriate. Since the factual premise of Cisco’s argument is wrong, the legal argument for exclusion of Dr. Sullivan’s testimony is also wrong.

In an attempt to prop up its “improper-royalty-base” argument, Cisco misconstrues Dr. Sullivan’s deposition testimony where he repeatedly informed Cisco that he did not conduct an independent infringement analysis. For example, Cisco states that Dr. Sullivan “confirmed that he did not exclude from his royalty base UCS deployments that do not use fabric extenders or I/O modules, and that he assumed all such deployments infringe.”¹⁴ Cisco cites the following deposition testimony in support:

Q: You have not made a separate determination whether UCS systems that do not use fabric extenders should be included in your server unit base; is that fair?

A: I have not made a determination of what infringes and what does not infringe. I have simply assumed infringement.

...

Q: And you have not made a separate determination whether UCS systems that do not use I/O modules should be included in your server unit base?

¹⁴ Dkt. [153] Cisco’s Opening Brief in support of its to Exclude the Reasonable Royalty Opinion of Ryan Sullivan (the “Motion”) p. 5 (citing Ex. 16, Deposition of R. Sullivan (“Sullivan dep.”), 140:19-25; 141:1-6 (June 22, 2018)).

A: Again, I have not made a determination of what infringes and what does not infringe; rather, I have simply assumed infringement for purposes of my analysis

Id. The testimony Cisco cites does support Cisco's claim that Dr. Sullivan assumes that UCS deployments without a FEX or I/O module infringe the '430 patent. All Dr. Sullivan stated was that he did not make an independent determination of infringement. Ex. 16, Sullivan dep., at 140:19-25; 141:1-6. Determining infringement was not his role. Dr. Sullivan is a damages expert, and as such, he was asked to assume infringement. That is, he opined to the results of a hypothetical negotiation, which "assumes that the asserted patent claims are valid and infringed." *Lucent Techs.*, 580 F.3d at 1325.

Cisco's next attempt at misdirection is the claim that "Dr. Sullivan admitted that his analysis is not based upon Dr. Jones's infringement allegations." While Dr. Sullivan's analysis is based on an assumption of infringement, rather than any analysis of infringement, Dr. Sullivan's analysis is entirely consistent with Dr. Jones's infringement opinion. *See* n. 5, above. Indeed, Cisco cites no evidence that Dr. Sullivan's analysis conflicts with Dr. Jones' opinion. As the factual premises of Cisco's arguments are false, Cisco's arguments must fail.

C. Dr. Sullivan's cost saving approach applies an appropriate methodology to the facts of this case

Cisco's complaints about Dr. Sullivan's "cost saving" approach are based on a misreading of applicable law, and a disagreement between experts, neither of which are viable reasons for excluding an expert's testimony under Rule 702. Cisco complains that Dr. Sullivan's cost saving approach is not grounded in sound economic principles, but Dr. Sullivan explained that it is based in accepted economic theory and cited credible sources in support. Cisco also complains that Dr. Sullivan's reasonable royalty would leave Cisco without any net profits, but this is at best a factual dispute as [REDACTED]

[REDACTED] Moreover, the law does not cap a reasonable royalty at the infringer's profits.

1. Dr. Sullivan's cost-saving approach is economically sound

Dr. Sullivan's cost-saving approach is based in sound, well-established economic principles. As described in his opening report, Dr. Sullivan performed a cost savings analysis to determine the economic benefit of the claimed technology to Cisco. Ex. 1, Sullivan Rpt. ¶¶ 142-65. Dr. Sullivan measured that benefit by determining the share of TCO savings derived from UCS that is attributable to the claimed technology. *Id.* ¶¶ 142-65. As Cisco tells its customers, these cost-savings benefit consumers by decreasing the total cost the customer must pay to own and operate the infringing UCS system.¹⁵

These features in turn increase the value of and demand for UCS and makes Cisco competitive in the marketplace. Cisco therefore reaps the benefits of TCO cost saving through increased sales and profit, which Dr. Sullivan appropriately identifies as "producer surplus."¹⁶

In linking customer benefit to producer surplus, Dr. Sullivan is not haphazardly combining two unrelated economic principles as Cisco claims. Rather, Dr. Sullivan observes the obvious and documented relationship between a lower total cost of ownership and a vendor's ability to charge a premium for the initial acquisition of the product in question. *Id.* Since the customer's focus on the total cost of ownership savings makes the acquisition price almost "irrelevant,"¹⁷ Cisco is able to charge a premium for the acquisition.

¹⁵ *Id.* ¶¶ 60-61; *see also, e.g.*, Ex. 18, CISCO00063923 (claiming a [REDACTED] reduction in infrastructure costs, 90% less deployment time, [REDACTED] deployment capacity with no staff increase, [REDACTED] less power cooling costs, and [REDACTED] faster application performance).

¹⁶ Ex. 1, Sullivan Rpt. ¶ 155 (citing Varian, Hal (2003), *Intermediate Microeconomics*, 6th ed., New York, NY: Norton, at 388).

¹⁷ *Id.* ¶ 136 at n. 388 (citing Ex. 11, Cisco Website, "Blade Server TCO and Architecture – You Cannot Separate Them," 9/10/2013, <https://blogs.cisco.com/datacenter/blade-server-tco-and-architecture-you-cannot-separate-them>. ("The acquisition cost difference between server vendors is irrelevant.... What makes or breaks data center economics are the OpEx costs (primarily management) and these significantly impact business success and profitability.")).

Cisco wrongly claims that Dr. Sullivan cites no authority for his approach of determining that TCO cost savings are equivalent to producer surplus to Cisco as described in ¶ 155 of his report. Dkt. [153], Motion at 17. Paragraph 155 of Dr. Sullivan's report states in part that "[t]he surplus created by the patented technology through its share of TCO savings for UCS customers represents an increase in producer surplus that is driven by the patented technology, and captures additional profit that Cisco receives," *followed by a citation to* "Varian, Hal (2003), Intermediate Microeconomics, 6th ed., New York, NY: Norton, at 388." Ex. 1, Sullivan Rpt. ¶ 155. So the very paragraph that Cisco cites contains the authority Cisco claims is missing. Dr. Sullivan's analysis is standard economics taught in numerous textbooks. Ex. 16, Sullivan dep at 86:9-25.

Cisco's most acrobatic straw-man argument is its suggestion that Dr. Sullivan's calculated TCO savings per UCS server is more than the total UCS revenue per server. Cisco states that Cisco's 2009 "cost savings tool" calculates the total cost savings per UCS server at [REDACTED], which is above Dr. Sullivan's estimate of [REDACTED] in revenue per UCS server. Cisco then argues that TCO cost savings cannot be attributed to producer surplus if the TCO savings are more than the revenue. Dkt. [153], Motion at 18. The most obvious flaw in Cisco's argument is that Dr. Sullivan *does not use* Cisco's 2009 "cost savings tool" (although Cisco presented it to customers as an accurate representation of the value of UCS) and instead appropriately relies on Cisco's updated online tool, which provides an estimated [REDACTED] in cost savings per UCS server, significantly lower than the estimated [REDACTED] in revenue per UCS server. Ex. 1, Sullivan Rpt. ¶¶ 148-153; *id* at Attachment H-1. Dr. Sullivan then apportions these cost savings down to a [REDACTED] per-unit royalty to account for technological features and Cisco's commercialization efforts that are not attributable to the '430 patent. *Id.* ¶¶ 154-165. Cisco cannot use its own marketing of higher cost savings, which Dr. Sullivan did not rely on, to discredit Dr. Sullivan's analysis.

2. The royalty resulting from the cost savings approach is reasonable

Cisco complains that Dr. Sullivan's proposed per-unit royalty would leave Cisco without a profit at the contribution-margin level, and that the royalty must therefore be unreasonable. Dkt. [153], Motion at 18-19. At best, Cisco's complaint is a dispute of fact, not a methodological dispute. Further, Cisco's analysis is flawed because: 1) [REDACTED] 2) under the facts of this case, gross profit, not contribution margin, is the appropriate measure of the reasonableness of the royalty, and 3) an infringer's profit is not a cap on the reasonable royalty.

[REDACTED]

[REDACTED]

[REDACTED] 18 [REDACTED]

[REDACTED]

[REDACTED] 19 [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

¹⁸ Ex. 12, Cisco's Supp. Objections and responses to Interrogatory No. 7 (served May 15, 2018).

¹⁹ Written discovery closed on March 16, 2018. Dkt. [55], Order granting in part [54] Motion for a pre-trial scheduling order. Cisco amended its response to Egenera's Interrogatory No. 7 on May 15, 2018 to include "profit margin before taxes on a quarterly basis" for the business unit that contains the accused products. Ex. 12. On May 30, 2018 Cisco produced a spreadsheet containing additional information about the profitability of the business unit containing the accused products. Ex. 14, excerpt from CISCO00262831 (produced May 30, 2018).

²⁰ Ex. 15, Deposition of S. Naidu ("Naidu dep."), 32:2-16 (May 23, 2018).

[REDACTED], which Mr. Naidu could not justify. *Id.* at 50:21-24.²¹ Cisco's operating expenses, which are included in net profits, further include

[REDACTED]. *Id.* at 52:6 - 53:11. Cisco's corporate representative could not explain how that allocation was made. *Id.* at 53:8-11. [REDACTED]

[REDACTED] *Id.* at 61:9-62.

[REDACTED] Cisco has still not produced information disclosing the profitability of the infringing products themselves. Under these facts, Cisco cannot justify its claim that Dr. Sullivan's reasonable royalty would leave Cisco without a profit.

Second, in yet another straw-man argument, Cisco mischaracterizes Dr. Sullivan's analysis as relying on Cisco's contribution margin, and then criticizes Dr. Sullivan's royalty for "conflicting" with Cisco's contribution margin. Dr. Sullivan does not base his opinion on Cisco's purported contribution margin. [REDACTED]

[REDACTED] The phrase "contribution margin" does not appear in Dr. Sullivan's opening report, and Dr. Sullivan thoroughly discusses and accounts for Cisco's contribution margin in his supplemental report.²³ Dr. Sullivan opines that

²¹ "Q: Do you know how Cisco decided to [REDACTED]? MR HARRITS: Objection, scope. THE WITNESS: I don't know."

²² Ex. 14, excerpt from CISCO00262831 (produced May 30, 2018).

²³ Ex. 13, Supplemental Expert Report of R. Sullivan, Ph.D. ("Sullivan Supp. Rpt.") ¶¶ 5-6, 11-12. Dr. Sullivan furthermore does not attempt to "split" Cisco's profit between Egenera and Cisco; rather, he calculates a reasonable royalty to compensate Egenera for Cisco's use of the

“incremental profit,” which in this case is the profit realized from sales of additional UCS server systems, is the relevant measure in determining the benefit the ’430 patent confers to Cisco.²⁴ As discussed above, [REDACTED]

[REDACTED]

[REDACTED]

Finding that gross profits are the most appropriate measure of Cisco’s incremental profits, Dr. Sullivan determines that the gross profit margin for the Cisco business unit containing the accused products averages [REDACTED]. *Id.* ¶ 4. As the implied royalty rate in Dr. Sullivan’s opening report is [REDACTED] Dr. Sullivan notes that his implied royalty is [REDACTED]. In any case, courts have approved of cases where the reasonable royalty resulted in negative margins even at the gross profits level. *See Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1209 (Fed. Cir. 2010) (approving of a royalty that left the infringer with negative profits at the gross profits level); *Golight, Inc. v. Wal-Mart Stores, Inc.*, 355 F.3d 1327, 1338 (Fed. Cir. 2004) (affirming a reasonable per-unit royalty of \$31.80 despite infringer’s claim of profits of only \$8.00 per unit).

Third, Dr. Sullivan’s royalty would be appropriate even if contribution margin were the proper measure of profits, and even if Dr. Sullivan’s reasonable royalty resulted in a negative

patented technology. As explained in Dr. Sullivan’s opening report, the commercialization apportionment seeks to separate the impact of the patented technology from Cisco’s own efforts and contributions toward commercializing the technology claimed in the ’430 patent by way of developing and selling UCS. Ex. 1, Sullivan Rpt. ¶¶ 156-63.

²⁴ Ex. 13, Sullivan Supp. Rpt ¶ 6; *see also* Ex. 1, Sullivan Rpt. ¶ 155 (“Producer surplus is the difference between the firm’s revenue and its total variable cost; it is the firm’s variable profit.”).

²⁵ Ex. 13, Sullivan Supp. Rpt ¶¶ 6, 11 (“In this case, incremental profit is most closely represented by the gross margin discussed above, because the calculation of the gross margin only subtracts COGS, which are incremental costs, from revenue.”).

contribution margin for Cisco on the accused products. “There is no rule that a royalty be no higher than the infringer’s net profit margin.” *State Indus.*, 883 F.2d at 1580; *accord Powell*, 663 F.3d at, *Ralph*, 382 F.3d at 1384; *Golight, Inc.*, 355 F.3d at 1338; *Ericsson*, 2018 U.S. Dist. LEXIS 78857, at *18. Moreover, when the patent holder is forced to provide a license it would not have otherwise provided, the question of what the *infringer* would agree to becomes even less relevant. *Ralph*, 382 F.3d at 1384. Egenera never licensed the ’430 patent. It licensed *software* for resale that practiced the ’430 patent, but never provided a bare license to the patent itself.²⁶ Egenera’s unwillingness to provide a license to its flagship patent must be measured against Cisco’s resistance to paying a royalty above its net profits. *See Ralph*, 382 F.3d at 1384.

The cases Cisco cites do not require the outcome Cisco suggests. In support of its no-royalty-above-profits argument, Cisco cites *Lindemann*, a 1990 Federal Circuit case that Cisco describes as “rejecting jury finding of royalty rate above infringer’s profit level because such a result would be ‘absurd’.”²⁷ Cisco’s description of *Lindemann* is inaccurate: there was no jury finding on damages and the appellate court *affirmed* the lower court’s decision. *Lindemann*, 895 F.2d at 1406. While the court did find that “in light of all the evidence in [the] case,” the plaintiff’s requested royalty in excess of net profits would be unreasonable, the court further clarified that “[i]n view of the sparse and totally inadequate record Lindemann created at trial, we cannot say that Lindemann proved entitlement to an award greater than \$ 10,000.” *Id.* Considering the Federal Circuit’s guidance before and after *Lindemann* permitting damages in

²⁶ Ex. 2, Kerrigan dep 56:14-19. Cisco’s damages expert admits as much, stating that “[i]t is my understanding that the ’430 patent has never been licensed.” Ex. 3, Becker Rpt. ¶ 168.

²⁷ Dkt. [153], Motion at 19, (citing *Lindemann Maschinenfabrik GmbH v. Am. Hoist & Derrick Co.*, 895 F.2d 1403, 1408 (Fed. Cir. 1990)).

excess of net profits, *Lindemann* cannot support a rule that such damages are improper. *See State Indus.*, 883 F.2d at 1580; *Lindemann*, 895 F.2d at 1406; *Ralph*, 382 F.3d at 1384.²⁸

D. Dr. Sullivan’s “acquisition” approach does not claim a royalty on unaccused products

Cisco mischaracterizes Dr. Sullivan’s analysis as supposedly including revenue from unaccused products. Cisco’s description of Dr. Sullivan’s analysis is both incorrect and incomplete. Dr. Sullivan’s acquisition approach can be summarized as follows:²⁹

1. Dr. Sullivan calculated the ratio of Cisco’s payment for Nuova as a share of the total present value of Nuova cash flows at the time of acquisition. This is the “payment share of DCF [discounted cash flow].”
2. Multiplying the payment share of DCF by the 2013 Nuova cash flow as a stabilized target results in what Cisco effectively paid for the 2013 Nuova cash flows. This is the “effective payment of DCF.”
3. Dividing the effective payment of DCF by the 2013 Nuova revenue results in a [REDACTED] ratio representing Cisco’s effective payment for Nuova as a share of expected stabilized revenue. This is the “effective payment share.”
4. After calculating the effective payment share (the ratio of what Cisco effectively paid as a share of revenue), Dr. Sullivan steps away from the Nuova acquisition, and multiplies the accused UCS revenue per server by the effective payment share. The result is an estimate of what Cisco would be willing to pay for future cash flow associated with the sale of a UCS system on a per-server basis.
5. Dr. Sullivan then applies his technology apportionment ratio to separate out the percentage of the benefit attributable to the patented technology.

Cisco invents a flaw in step 4 by deconstructing the UCS system into its component parts, claiming that the individual components do not infringe, and declaring Dr. Sullivan’s approach

²⁸ Cisco also cites a Southern District of Texas case where the court rejected a royalty that not only eliminated profits, but also revenue. Dkt. [153] Motion p. 19 citing *WesternGeco L.L.C. v. ION Geophysical Corp.*, No. 4:09-CV-1827, 2012 U.S. Dist. LEXIS 98230, at *7 (S.D. Tex. 2012). Even if Cisco could show that Dr. Sullivan’s reasonable royalty eliminated the profits on the accused products, there is no dispute that the royalty leaves the great majority of gross profits and revenue to Cisco.

²⁹ Ex. 1, Sullivan Rpt. ¶¶ 166-75.

unreliable. Cisco's argument ignores that UCS is a *system*, not a collection of accused and non-accused sub-components. As discussed in Dr. Sullivan's opening report, Cisco describes UCS as: "a data center platform that unites computing, networking, storage access, and virtualization resources into a cohesive system designed to reduce total cost of ownership . . . The system is an integrated, scalable, multichassis platform in which all resources participate in a unified management domain."³⁰ Cisco's damages expert agrees, opining that "[t]hrough UCS, every part of the network, from the fabric interconnects down to the Ethernet cards in the blades, is managed as a single entity." Ex. 3, Becker Rpt. ¶ 113. The products Dr. Sullivan relies on for calculating Cisco's revenue per UCS server are all components used to build the infringing UCS system. *See* Ex. 1, Sullivan Rpt. ¶¶ 38-46. If Cisco believes, for example, that the amount or configuration of memory that it provides confers some unique benefit, then Dr. Becker was free to disagree with Dr. Sullivan's technological apportionment analysis. However, that disagreement does not suggest that Dr. Sullivan's testimony should be excluded. *See Astrazeneca AB v. Apotex Corp.*, 782 F.3d 1324, 1339 (Fed. Cir. 2015) (refusing to require separation of infringing and non-infringing sub-components because "Astra's patents cover the infringing product as a whole, not a single component of a multi-component product.").

Cisco does not even argue that the accused UCS system could function without Cisco's purportedly non-accused subcomponents. Cisco cannot claim that, for example, the system memory sold with the UCS servers is a separate product just because Cisco gave it its own part code. All computers (including servers) require system memory to function.³¹ Cisco also cites no

³⁰ *Id.* ¶ 36 (citing Cisco Website, UCS 6200 Series Fabric Interconnects Data Sheet, 11/7/2016, https://www.cisco.com/c/en/us/products/collateral/servers-unified-computing/ucs-6200-series-fabricinterconnects/data_sheet_c78-675245.html) (attached as Ex. 17).

³¹ Ex. 4, Declaration of M. Jones ¶ 3. *See also* Sullivan Rpt. Attachment G-1 p. 2 (listing the amount of memory included with Cisco's various UCS servers).

evidence that any of the subcomponents that it chooses to make individually available are actually sold separately or drive customer demand for the infringing UCS. “As far as Dr. Jones is aware, if not for the technology claimed in the ’430 patent, Cisco would not have had a viable virtual server deployment and management system such as UCS.” Ex. 1, Sullivan Rpt. Attachment A-4 p.2. Instead, Dr. Sullivan explains in his opening report that he applies a technology apportionment factor (see step 5 above) to isolate the value contribution of the technology claimed in the ’430 patent from other contributions—e.g., memory.

Since the infringing system in this case is a particular configuration of a group of components, taking Cisco’s deconstructionist argument to its logical conclusion would exclude everything in Cisco’s UCS product line. The ’430 patent claims a platform for automatically deploying a virtual processing area network. Given that description, system memory doesn’t infringe on its own, so Cisco’s argument would exclude it. CPUs don’t infringe on their own, so Cisco’s argument would exclude those as well. Power supplies don’t infringe by themselves, so Cisco’s argument would remove those. The bare-metal chassis doesn’t infringe, so Cisco’s argument would remove it too. UCS Manager software cannot run without CPUs, system memory, and power supplies, so Cisco’s argument would exclude even that. At the end, nothing remains, and Cisco can claim there was no infringing system after all. As all parties acknowledge that UCS is an integrated system, Cisco’s deconstructionist argument is inappropriate.

IV. CONCLUSION

For all the reasons above, the Court should deny Cisco’s motion.

Dated: August 31, 2018.

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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the above and foregoing document has been served on all counsel of record via the Court's ECF system on August 31, 2018.

/s/ James E. Quigley

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